



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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GOVERNOR

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COMMISSIONER

**Daaquam Maine Inc.
Penobscot County
Costigan, Maine
A-389-70-E-R**

**Departmental
Findings of Fact and Order
Part 70 Air Emission License**

After review of the Part 70 License renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Daaquam Maine, Inc. (Daaquam)
RENEWAL LICENSE NUMBER	A-389-70-E-R
LICENSE TYPE	Part 70 License
NAICS CODES	2421
NATURE OF BUSINESS	Lumber Mill
FACILITY LOCATION	Costigan, Maine
RENEWAL LICENSE ISSUE DATE	April 2, 2009
LICENSE EXPIRATION DATE	April 2, 2014

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

Fuel Burning Equipment

EMISSION UNIT ID	UNIT CAPACITY	UNIT TYPE
Boiler #1	95.0 MMBtu/hr	Biomass or #2 Fuel Oil (0.5% S) or Specification Waste Oil (0.7% S)
Boiler #2	6.2 MMBtu/hr	#2 Fuel Oil (0.5% S)

Process Equipment

EQUIPMENT	POLLUTANT EMITTED	POLLUTION CONTROL EQUIPMENT
Lumber Grading/Sealing/Spray Painting Operations	VOC & HAP	None
Drying Kilns	VOC & HAP	None

AUGUSTA

17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 760-3143

Daaquam has additional insignificant activities which do not need to be listed in the emission equipment table above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (last amended December 24, 2005).

C. Application Classification

The application for Daaquam does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be a Part 70 License renewal issued under *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (last amended December 24, 2005).

II. FACILITY AND EMISSION UNIT DESCRIPTION

Daaquam owns a lumber facility in Costigan, Maine consisting of debarking, sawing, kiln drying and planing operations. The majority of emissions from the Daaquam facility would be generated by the main boiler and process particulate emissions.

The facility has not operated since February 2001, and Daaquam has maintained a valid air emission license in anticipation of future operation. Upon start-up Daaquam will comply with all license limits and conditions including record keeping and reporting.

A. Boiler #1

Boiler #1 was manufactured by Babcock and Wilcox in 1973 with a maximum design heat input capacity of 95.0 MMBtu/hr firing biomass or #2 fuel oil or specification waste oil and is not subject to NSPS requirements. Its primary fuel is biomass with a maximum firing rate of 10.6 tons per hour.

The secondary fuel type is #2 fuel oil meeting ASTM 396D criteria (0.5% sulfur maximum by weight as documented through supplier fuel receipts) with a maximum firing rate of 679 gallons per hour. Emissions from Boiler #1 exhaust through a multiple cyclonic separator and then through Stack #1.

NO_x RACT

Daaquam is subject to *Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides*, 06-096 CMR 138 (effective August 4, 1994) due to having the potential to emit more than 100 tons per year of NO_x. The emission standard for Boiler #1 as set forth in 06-096 CMR 138, Section 4(3) is 0.40 pounds per million Btu (lb/MMBtu). The NO_x license limit for Boiler #1 is 0.35 lb/MMBtu, thus satisfying the requirements of 06-096 CMR 138.

40 CFR Part 64 – Compliance Assurance Monitoring (CAM) Applicability

CAM applies to emission units located at a major source required to obtain a Part 70 permit in which the emissions unit is subject to an emission limitation, utilizes a control device to achieve that limitation and has pre-control emissions which are greater than the major source threshold for the controlled pollutant. Boiler #1 utilizes a multi-clone to control PM emissions and has the potential to emit greater than 100 tons per year of PM prior to the control equipment. As such, CAM applies only to the PM control device for Boiler #1.

PM CAM:

Indicator	Multi-Cyclone Pressure Differential	
General Criteria		
Measurement Method	Differential pressure is measured using a differential pressure gauge.	
Indicator Range	An excursion is a differential pressure across the multi-clone greater than one inch of water column above the highest pressure drop which occurred during the most recent performance test demonstrating compliance with particulate matter emission. An excursion is also a differential pressure across the multi-clone lower than the lowest pressure drop which occurred during the most recent performance test demonstrating compliance with particulate matter emission limits. An excursion shall trigger an inspection, corrective action as necessary, and a reporting requirement.	
Performance Criteria		
Data Representatives	A differential pressure gauge is used to measure the pressure drop between the inlet and outlet of the multi-clone. The accuracy of the differential pressure gauge is +/- 2%.	
QA/QC	The differential pressure gauge is calibrated annually.	
Monitoring Frequency	The differential pressure across the multi-clone will be measured once per calendar day.	
Data Collection Procedure	Data shall be recorded and stored in a logbook.	
Averaging Period	None	

Streamlining

1. Opacity

Visible Emission Regulation, 06-096 CMR 101 (last amended May 18, 2003), § 2(D) is applicable for visible emissions; however, the BPT opacity limit was determined in Air Emission License A-389-70-A-I (9/10/1999).

Opacity shall be recorded on a semi-monthly basis; readings are to be taken every 15 seconds for at least 18 consecutive minutes using EPA Method 9.

2. PM

- a. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 101 (last amended November 3, 1990), Section 2(A)(1) contains an applicable PM lb/MMBtu emission standard.
- b. A previous BPT analysis established the applicable PM emission limit as 32.3 lbs/hr in A-389-70-A-I (9/10/1999).

Daaquam accepts streamlining for the PM lb/MMBtu standard. The BPT limit is the most stringent and is therefore the only PM lb/MMBtu emission limit included in this license.

3. PM₁₀

BPT establishes the only applicable PM₁₀ emission limit as 32.3 lbs/hr.

4. SO₂

- a. *Low Sulfur Fuel*, 06-096 CMR 106 (last amended July 4, 1999), Section 4, contains an applicable SO₂ lb/MMBtu emission standard.
- b. A previous BACT analysis established an applicable SO₂ lb/MMBtu emission limit.

Daaquam accepts streamlining for the SO₂ lb/MMBtu standard. The BACT limit is the most stringent and is therefore the only SO₂ lb/MMBtu emission limit included in this license. A previous BACT analysis established the only applicable SO₂ emission limit as 48.2 lb/hr.

5. NO_x

BPT establishes the only applicable NO_x emission limit as 33.3 lb/hr.

6. CO

BPT establishes the only applicable CO emission limit as 114 lb/hr.

7. VOC

BPT establishes the only applicable VOC emission limit as 7.6 lb/hr.

Periodic Monitoring

Periodic monitoring shall consist of record keeping which demonstrates #2 fuel oil use and firing rates by Boiler #1, and delivery receipts or other records from the supplier indicating the amount (gallons). Annual biomass and specification waste oil usage shall be recorded on a monthly basis.

Percent oxygen in the stack exhaust shall be measured a minimum of four (4) times per shift while Boiler #1 is operating except during monitor downtime for scheduled maintenance or unavoidable malfunctions. This oxygen value is used to allow boiler operators to run the boiler optimally for given ambient and fuel conditions.

Daaquam shall conduct particulate emission (PM) testing, and demonstrate compliance, at least once every even numbered year on Boiler #1. The initial test shall be conducted within 90 days of Boiler #1 being fired and producing steam in the steam drum. [06-096 CMR 104 and A-389-70-A-I (9/10/1999), BPT]

Daaquam shall conduct one NO_x stack test, and demonstrate compliance, on Boiler #1 within 90 days of Boiler #1 producing steam in the steam drum. This will be used to establish a baseline for future reference. [06-096 CMR 140 and A-389-70-A-I (9/10/1999), BPT]

B. Boiler #2

Boiler #2 was manufactured by York Shipley in 1975 with a maximum design heat input capacity of 6.2 MMBtu/hr firing #2 fuel oil (0.5% sulfur maximum by weight as documented through supplier fuel receipts) and is not subject to NSPS requirements. The maximum firing rate is 44.3 gallons per hour. Emissions from Boiler #2 exhaust through Stack #2.

Streamlining

1. Opacity

Visible Emission Regulation, 06-096 CMR 101 (last amended May 18, 2003), § 2(D) is applicable for visible emissions; however, the BPT opacity limit was determined in air emission license A-389-70-A-I (9/10/1999).

Opacity shall be recorded on a semi-monthly basis; readings are to be taken every 15 seconds for at least 18 consecutive minutes using EPA Method 9.

2. PM

- a. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 101 (last amended November 3, 1990), Section 2(A)(1) contains an applicable PM lb/MMBtu emission standard.
- b. A previous BPT analysis established an applicable PM emission limit as 1.24 lb/hr in air emission license A-389-70-A-I (9/10/1999).

Daaquam accepts streamlining for the PM lb/MMBtu standard. The BPT limit is the most stringent and is therefore the only PM lb/MMBtu emission limit included in this license.

3. PM₁₀

BPT establishes the only applicable PM₁₀ emission limit as 1.24 lb/hr.

4. SO₂

- a. *Low Sulfur Fuel*, 06-096 CMR 106 (last amended July 4, 1999), Section 4, contains an applicable SO₂ lb/MMBtu emission standard.
- b. A previous BACT analysis established an applicable SO₂ lb/MMBtu emission limit.

Daaquam accepts streamlining for the SO₂ lb/MMBtu standard. The BACT limit is the most stringent and is therefore the only SO₂ lb/MMBtu emission limit included in this license.

A previous BACT analysis established the only applicable SO₂ emission limit as 3.14 lb/hr.

5. CO

BPT establishes the only applicable CO emission limit as .31 lb/hr.

6. VOC

BPT establishes the only applicable VOC emission limit as .06 lb/hr.

Periodic Monitoring

Periodic monitoring shall consist of record keeping which includes records of #2 fuel oil use through purchase receipts indicating the amount (gallons) and percent sulfur by weight.

Daaquam shall clean the oil guns once per year and keep a maintenance log for Boiler #2. The log shall include any work performed on the boiler as well as oil gun cleaning frequencies.

C. Lumber Grading and Spray Painting Operations

Once rough-cut kiln-dried dimensional lumber has been planed to its final dimensions, it is graded, sorted, labeled and stacked/bundled for shipping. An ink stamp indicating lumber grade is applied by hand or machine. The ends of the studs are sealed with wax and a coating of glue is sprayed on one end to apply bar codes. The mill logo is spray painted on bundles prior to shipping.

Streamlining

06-096 CMR 101, Section 2(C) is applicable for visible emissions; however, the BPT opacity limit was determined in air emission license A-389-A-I (9/10/1999).

BPT has established VOC and HAP limits at 3 tons per year each.

Periodic Monitoring

Periodic monitoring for the lumber grading and spray painting operations shall consist of record keeping including pounds of product purchased, used and percent VOC and HAP.

D. **Lumber Kilns**

Historically, the majority of the wood processed at the mill was spruce, with lesser amounts of balsam fir and red pine. The drying of lumber releases both VOCs and HAPs. Only water vapour is emitted for visible emissions from the kilns therefore there is no opacity limit.

Streamlining:

VOC emissions from the kilns were based on NCASI testing resulting in an emission factor of 1.283 lb VOC/MBF (VOCs per thousand board feet) for a spruce/fir mixture.

HAP emissions from the kilns were based on NCASI's "Handbook of Substance-Specific Information for National Pollutant Release Inventory Reporting". So as to remain a minor source of HAPs (less than 10 tons per year of a single HAP and less than 25 tons per year of total HAPs), Daaquam must limit the annual kiln throughput to 155,000 MBF (thousand board feet) per year on a 12 month rolling total.

Periodic Monitoring:

Periodic monitoring for the kilns shall consist of record keeping documenting the monthly kiln throughput in board feet.

E. **Degreaser Unit**

Daaquam operates degreaser units subject to *Solvent Cleaners* 06-096 CMR 130 (last amended June 28, 2004).

Periodic monitoring

Periodic monitoring for the degreaser units shall consist of recordkeeping including records of solvent added and removed.

F. **Fugitive Emissions**

Fugitive particulate matter sources include material stockpiles and roadways. Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20 percent, except for no more than five (5) minutes in any 1 hour period. Compliance shall be determined by an aggregate of the individual 15 fifteen-second opacity observations which exceed 20 percent in any one (1) hour. [06-096 CMR 101]

G. General Processing Emissions

Wood chippers, de-barkers, conveyors and transfer points shall be covered or enclosed. Any conveyor totally within a building shall be considered enclosed.

Visible emissions from any general process source (including chippers) shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1 hour period. [A-389-70-A-I (9/10/1999), BPT]

H. Facility Emissions

The following total licensed annual emissions for the facility are based on the following raw materials used:

- Boiler #1 using 77,500 tons of biomass per year (4,500 Btu/lb, 50% moisture) based on a 12 month rolling total.
- Combined Boiler #1 and Boiler #2 fuel oil use of 100,000 gallons per year #2 fuel (140,000 Btu/gal, 0.5% S by weight) based on a 12 month rolling total.
- Specification waste oil use in Boiler #1 of 1,200 gallons per year based on a 12 month rolling total.
- Kiln throughput of 155,000 MBF per year, based on a 12 month rolling total.

**Total Licensed Annual Emission for the Facility
Tons/year**

(Used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC	Single HAP	Total HAP
Biomass	118.58	118.58	3.49	122.06	418.50	27.9	-	-
Fuel Oil	1.40	1.40	3.53	2.45	0.25	0.01	-	-
Kiln	-	-	-	-	-	99.43	9.96	17.68
Lumber Grading and Spraying	-	-	-	-	-	3.0	-	-
Total TPY	120.0	120.0	7.0	124.5	418.8	130.3	10.0	17.7

III. AIR QUALITY ANALYSIS

Daaquam submitted an ambient air quality analysis as part of Air Emissions License Amendment A-389-71-C-M dated October 17, 1997 which is still valid at this time. An additional ambient air quality analysis is not required for this Part 70 License Renewal.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-389-70-E-R pursuant to 06-096 CMR 140 and the preconstruction permitting requirements of 06-096 CMR 115 and subject to the standard and special conditions below.

All Federally enforceable and State Only enforceable conditions in existing air licenses previously issued to Daaquam pursuant to the Department's preconstruction permitting requirements in 06-096 CMR 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 CMR 115 for making such changes, and pursuant to the applicable requirements in 06-096 CMR 140.

For each standard and special condition which is State enforceable only, State only enforceability is designated with the following statement: **Enforceable by State Only.**

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD STATEMENTS

- (1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 140]
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 140]
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 CMR 140]
- (4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 140]
- (5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 140]
- (6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:
 - A. Such applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
 - B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of

permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated August 3, 2004.

	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
A	Boiler 1	40 CFR Part 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Commenced construction prior to June 19, 1984
B	Boiler 1	40 CFR Part 60.44(C)	There is no NSPS NOx limit if the affected facility has an annual capacity factor less than 10% for oil firing in combination with firing wood	Boiler 1 has an annual capacity factor less than 10% for oil firing
C	Boiler 1	40 CFR Part 63, Subpart DDDDD (Boiler MACT)	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters	Facility emits less than 10.0 TPY of a single HAP and less than 25.0 TPY of total HAP
D	Boiler 2	40 CFR Part 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Commenced construction prior to June 9, 1989
E	Boiler 2	40 CFR Part 64	Compliance Assurance Monitoring	Boiler 2 does not utilize a pollution control device
F	Boiler 2	40 CFR Part 63 Subpart DDDDD (Boiler MACT)	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters	Facility emits less than 10.0 TPY of a single HAP and less than 25.0 TPY of total HAP
G	Boiler 2	06-096 CMR 138	Reasonably Available Control Technologies for Facilities that Emit Nitrogen Oxide (NOx-RACT)	Boiler 2 has a fuel limit which restricts NOx emissions to less than 10 tons per year.

[06-096 CMR 140]

- (7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:
- A. Additional applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is
 - B. later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to 06-096 CMR 140;
 - C. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by
 - D. EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
 - E. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
 - F. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[06-096 CMR 140]

- (8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.
- [06-096 CMR 140]

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license; (38 M.R.S.A. §347-C)
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140; [06-096 CMR 140]
- (3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request; [06-096 CMR 140] **Enforceable by State Only.**
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S.A. §353.
- (5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions; [06-096 CMR 140] **Enforceable by State Only.**
- (6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license; [06-096 CMR 140]
- (7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [06-096 CMR 140]

- (8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- A. perform stack testing under circumstances representative of the facility's normal process and operating conditions:
 - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;
 - 2. to demonstrate compliance with the applicable emission standards; or
 - 3. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion. [06-096 CMR 140] **Enforceable by State Only.**
- (9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:
- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- [06-096 CMR 140] **Enforceable by State Only.**

- (10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.
- A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;
- B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests. Pursuant to 38 M.R.S.A. § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.
- C. All other deviations shall be reported to the Department in the facility's semiannual report.
[06-096 CMR 140]
- (11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 140]
- (12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. [06-096 CMR 140]

- (13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:
- (a) The identification of each term or condition of the Part 70 license that is the basis of the certification;
 - (b) The compliance status;
 - (c) Whether compliance was continuous or intermittent;
 - (d) The method(s) used for determining the compliance status of the source currently and over the reporting period; and
 - (e) Such other facts as the Department may require in determining the compliance status of the source;
- [06-096 CMR 140]

SPECIAL CONDITIONS

- (14) Daaquam shall not exceed a facility wide #2 fuel oil use limit of 100,000 gallons per year on a 12 month rolling average. Compliance with the fuel use limit shall be demonstrated by fuel use records kept on site. Compliance with the fuel type shall be demonstrated by purchase records from the supplier demonstrating the fuel meets the criteria in ASTM D396 for #2 fuel. [A-389-70-A-I (9/10/1999), BPT]

(15) **Boiler #1**

- A. Daaquam is licensed to operate Boiler #1 (95.0 MMBtu/hr) which is licensed to fire biomass, #2 fuel oil and specification waste oil.
- B. Boiler #1 steam production shall be limited to 60,000 pounds per hour. Daaquam shall monitor and record steam flow continuously for Boiler #1. Note: "continuously" is defined as: Equally spaced data points with at least one data point for each successive 15 minute period. A minimum of three evenly spaced data points constitutes a valid hour.

The steam flow monitor (parameter monitor) must record accurate and reliable data. If the parameter monitor is recording accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established

quality assurance and quality control procedures or unavoidable malfunctions.
[A-389-70-B-M (9/27/2000), BPT]

C. Emissions from Boiler #1 shall not exceed the following limits:

<i>Pollutant</i>	<i>Lb/MMBtu</i>	<i>Origin and Authority</i>	<i>Enforceability</i>
PM	0.34	A-389-70-A-I (9/10/1999), BPT	Federally Enforceable Through Title V Permit
NO _x	.35	A-389-70-A-I (9/10/1999), BPT	Federally Enforceable Through Title V Permit

<i>Pollutant</i>	<i>Lb/hr</i>	<i>Origin and Authority</i>	<i>Enforceability</i>
PM	32.3	A-389-70-A-I (9/10/1999), BPT	Enforceable by State-only
PM ₁₀	32.3	A-389-70-A-I (9/10/1999), BPT	Enforceable by State-only
SO ₂ *	47.8	06-096 CMR 140, BPT	Enforceable by State-only
NO _x	33.25	A-389-70-A-I (9/10/1999), BPT	Enforceable by State-only
CO	114.0	A-389-70-A-I (9/10/1999), BPT	Enforceable by State-only
VOC	7.6	A-389-70-A-I (9/10/1999), BPT	Enforceable by State-only

*SO₂ lb/hr emission rate is based on firing 0.5% sulfur fuel oil.

- D. Particulate matter (PM, PM₁₀) emissions from Boiler #1 shall be controlled by the operation and maintenance of a two stage, multiple cyclonic separator system. [A-389-70-A-I (9/10/1999), BPT]
- E. Emissions from Boiler #1 shall vent to Stack #1, which shall be at least 70 feet AGL. [A-389-70-A-I (9/10/1999), BPT] **Enforceable by State Only.**
- F. Daaquam shall operate Boiler #1 such that the visible emissions from the stack do not exceed 20% opacity on a six (6) minute block average basis, for more than two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR 101]
- G. Boiler #1 opacity shall be read semi-monthly (i.e. every other week). Readings shall be made every 15 seconds for at least 18 consecutive minutes. Data shall be recorded in a logbook and kept on site. [06-096 CMR 101]

- H. Daaquam shall send at least one boiler operator to EPA Method 9 training (“smoke school”) once per session (two times per year). The operator attending the training shall pass the test. [A-389-70-A-I (9/10/1999), BPT]
- I. The handling of reclamation wood chips (stockpiles) shall be controlled to eliminate visible emission in excess of 5% opacity on a three (3) minute block average basis. [A-389-70-A-I (9/10/1999), BPT] **Enforceable by State Only.**
- J. Boiler #1 Fuel Use Limits:
1. Daaquam shall limit the annual biomass use in Boiler #1 to 77,500 tons. The annual limit shall be met over a 12-month rolling total demonstrated by the following formula. [A-389-71-C-M (10/17/1997), BPT]
Enforceable by State Only.
$$(\text{\#}/\text{hr steam flow} + \text{\#}/\text{hr Blowdown}) \times 0.00013258 = \text{Wet Tons of Biomass Fuel}$$
 2. Daaquam may burn no more than 1,200 gallons per year of specification waste oil in Boiler #1. The annual limit shall be met over a 12-month rolling total. Only waste oil meeting the criteria “specification” waste oil (as defined in the “Waste Oil Management Rules” shall be burned in Boiler #1). Note: a one-time analysis of the waste oil was performed and is considered typical percent sulfur for waste oil burned in the future.

A log shall be maintained recording the quantities of specification waste oil burned in Boiler #1 and shall be made available to the Department upon request. [A-389-70-B-M (9/27/2000), BPT]
 3. Daaquam shall not exceed a facility wide #2 fuel oil limit of 100,000 gallons per year on a 12 month rolling average. Compliance shall be demonstrated by fuel use records kept on site.
- K. Daaquam shall maintain records of annual #2 fuel oil use indicating the quantity of fuel consumed (gallons), and the heat content of the fuel, demonstrated by purchase records from the supplier.
- L. Daaquam shall measure and record the percent oxygen in the stack exhaust a minimum of four (4) times per shift while Boiler #1 is operating (except during monitor downtime for scheduled maintenance or unavoidable malfunctions). This oxygen value is used to allow boiler operators to run the boiler optimally for given ambient and fuel conditions. The monitor shall be

maintained according to the manufacturer's specifications. [A-389-70-A-I (9/10/1999), BPT]

- M. Ash from Boiler #1 grate and flyash shall be disposed of in accordance with the Bureau of Remediation and Waste Management (BRWM). Ash shall be sufficiently conditioned with water or transported in covered or enclosed containers so as to prevent fugitive emissions. [A-389-70-A-I (9/10/1999), BPT] **Enforceable by State Only.**
- N. Daaquam shall notify the regional Air Bureau inspector and the Air Bureau Licensing section upon re-firing (on either oil or biomass) of Boiler #1. [06-096 CMR 140, BPT]
- O. Daaquam shall notify the regional Air Bureau inspector and the Air Bureau Licensing section upon initial production of steam in the steam drum of Boiler #1 [06-096 CMR 140]
- P. PM CAM for Boiler #1 [40 CFR Part 64]

Indicator	Multi-Clone Pressure Differential
General Criteria	
1. Measurement Method	Differential pressure shall be measured using a differential pressure gauge.
2. Indicator Range	An excursion is a differential pressure across the multi-clone greater than one inch of water column above the highest pressure drop which occurred during the most recent performance test demonstrating compliance with particulate matter emission. An excursion is also a differential pressure across the multi-clone lower than the lowest pressure drop which occurred during the most recent performance test demonstrating compliance with particulate matter emission limits. An excursion shall trigger an inspection, corrective action as necessary, and a reporting requirement.
Performance Criteria	
3. Data Representativeness	The pressure drop shall be taken between the inlet and outlet of the multi-clone. The accuracy of the differential pressure gauge is +/- 2%.
4. QA/QC	The differential pressure gauge shall be calibrated annually.
5. Monitoring Frequency	The differential pressure across the multi-clone shall be measured once per calendar day.
6. Data collection procedure	Data shall be recorded and stored in a logbook.

- Q. Daaquam shall conduct particulate emission (PM) testing, and demonstrate compliance, at least once every even numbered year on Boiler #1. The initial test after restarting, once the unit has been restored, shall be conducted within 90 days of Boiler #1 producing steam in the steam drum. [06-096 CMR 140 and A-389-70-A-I (9/10/1999), BPT]
- R. Daaquam shall conduct one NO_x stack test, and demonstrate compliance, on Boiler #1 within 90 days of Boiler #1 producing steam in the steam drum.
- S. This will be used to establish a baseline for future reference. [06-096 CMR 140 and A-389-70-A-I (9/10/1999), BPT]

(16) **Boiler #2**

- A. Emissions from the boiler shall not exceed the following limits:

<i>Pollutant</i>	<i>Lb/MMBtu</i>	<i>Origin and Authority</i>	<i>Enforceability</i>
PM	0.20	A-389-71-C-M (10/17/1997), BPT	Federally Enforceable Through Title V Permit

<i>Pollutant</i>	<i>Lb/hr</i>	<i>Origin and Authority</i>	<i>Enforceability</i>
PM	1.24	A-389-71-C-M (10/17/1997), BPT	Enforceable by State only
PM ₁₀	1.24	A-389-71-C-M (10/17/1997), BPT	Enforceable by State only
SO ₂ *	3.14	A-389-70-A-I (9/10/1999), BPT	Enforceable by State only
NO _x	1.55	A-389-71-C-M (10/17/1997), BPT	Enforceable by State only
CO	0.31	A-389-71-C-M (10/17/1997), BPT	Enforceable by State only
VOC	0.06	A-389-71-C-M (10/17/1997), BPT	Enforceable by State only

*SO₂ lb/hr emission rate is based on firing 0.5% sulfur fuel oil.

- B. Daaquam shall clean the oil guns in Boiler #2 once per year and keep a maintenance log for Boiler #2. The log shall include any work performed on the boiler as well as oil gun cleaning frequencies. Note: this requirement is only applicable if Boiler #2 has been used to produce steam.
[A-389-70-B-M (9/27/2000), BPT]

- C. Daaquam shall operate Boiler #2 such that opacity from Stack #2 does not exceed 20 percent on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3 hour period. [A-389-70-A-I (9/10/1990), BPT]

(17) **Fuel Pile Fires**

Daaquam shall notify the regional Air Bureau inspector and the Air Bureau Licensing section of any fuel pile fires by the next business day. [06-096 CMR 140, BPT]

(18) **Lumber Grading and Spray Painting VOCs and HAPs**

- A. Daaquam shall emit less than 3 tons per year of VOCs as a result of the lumber grading and spray painting operations. Daaquam shall maintain a record of all pounds material purchased, used and percent VOC in the lumber grading and spray painting operations at the facility on a 12 month rolling total for VOC recordkeeping. **Enforceable by State Only.**
- B. Daaquam shall emit less than 3 tons per year of total HAPs as a result of the lumber grading and spray painting operations. Daaquam shall maintain a record of all pounds of material purchased, used and percent HAP in the lumber grading and spray painting operations at the facility on a 12 month rolling total for HAP accountability. **Enforceable by State Only.**

(19) **Kiln Throughput**

Daaquam shall limit the lumber processed through the kilns to 155,000 MBF per year, based on a 12 month rolling total. Compliance shall be based upon monthly records of kiln throughput. [06-096 CMR 140, BPT]

(20) **Degreaser**

Degreasers at Daaquam are subject to 06-096 CMR 130.

- A. Daaquam shall keep records of the amount of solvent added to each degreaser. [06-096 CMR 115, BPT]
- B. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 130]:
1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mm Hg (.039 in.Hg), or less, at 20° C (68° F);

2. Wipe cleaning; and
 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- C. Daaquam shall equip each cold cleaning degreaser unit with a cover that is easily operated with one hand if [06-096 CMR 130]:
1. the solvent vapor pressure is greater than 15 millimeters (.59 inches) of mercury measured at 38° C (100° F) by ASTM D323-89; or
 2. the solvent is agitated; or
 3. the solvent is heated.
- D. The following standards apply to remote reservoir cold cleaning machines that are applicable sources under 06-096 CMR 130.
1. Daaquam shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 CMR 130]:
 - (i) Waste solvent shall be collected and stored in closed containers.
 - (ii) Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - (iii) Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 68.95 kPa (10 psig). Flushing shall be performed only within the freeboard area of the cold cleaning machine.
 - (iv) The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - (v) Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the degreaser.
 - (vi) When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
 - (vii) Spills during solvent transfer shall be cleaned immediately. Sorbent material shall be immediately stored in covered containers.
 - (viii) Work area fans shall not blow across the opening of the degreaser unit.
 - (ix) The solvent level shall not exceed the fill line.
 2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 CMR 130]
- E. Daaquam shall not use any halogenated solvents in degreasing tanks. [06-096 CMR 140, BPT]

- F. For those degreasers containing less than 5% VOC, Daaquam shall keep the degreasers' Material Safety Data Sheets (MSDS) on file. [06-096 CMR 140m BPT]

(21) Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20 percent opacity, except for no more than five (5) minutes in any 1 hour period. Compliance shall be determined by an aggregate of the individual fifteen second (15 second) opacity observations which exceed 20 percent in any one (1) hour. [06-096 CMR 101]

(22) General Process Sources

Wood chippers, de-barkers, conveyors and transfer points shall be covered or enclosed. Any conveyor totally within a building shall be considered enclosed. Visible emissions from any general process source (including chippers) shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1 hour period. [A-389-70-A-I (9/10/1999), BPT]

(23) Compliance Assurance Monitoring

- A. Daaquam shall monitor multi-cyclone pressure drop and Stack #1 opacity within the ranges established by the CAM plan.
- B. Any excursion shall be reported on semiannual reports. If excursions occur, Daaquam must also certify intermittent compliance with the emission limits for the control device monitored on their annual compliance certification. [40 CFR 64]
- C. Upon detecting an excursion, Daaquam shall restore normal operation of the control equipment as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40 CFR 64.7.d]
- D. Prior to making any changes to the approved CAM plan, Daaquam shall notify the Department and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [40 CFR 64.7 (e)]

(24) Quarterly Reporting

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following, for the control equipment, parameter monitors, Continuous Emission Monitoring Systems (CEMS) or Continuous Opacity Monitoring Systems (COMS) required by this license: [06-096 CMR 117]

- A. All control equipment downtimes and malfunctions;
- B. All CEMS or COMS downtimes and malfunctions;
- C. All parameters monitor downtimes and malfunctions;
- D. All excess events of emission and operational limitations set by this Order, Statute, State or Federal regulations as appropriate. The following information shall be reported for each excess event:
 - 1. Standard exceeded;
 - 2. Date, time and duration of excess event;
 - 3. Amount of air contaminant emitted in excess of the applicable emission standard expressed in the units of the standard;
 - 4. A description of what caused the excess event;
 - 5. The strategy employed to minimize the excess event; and
 - 6. The strategy employed to prevent reoccurrence.
- E. A report certifying there were no excess emissions, if that is the case.

(25) Semiannual Reporting

- A. The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due on July 31st and January 31st of each year. The facility's designated responsible official must sign this report.
- B. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date.
- C. Each semiannual report shall include a summary of the periodic and CAM monitoring required by this license.
- D. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six month period.

(26) **Annual Compliance Certification**

Daaquam shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The initial annual compliance certification is due January 31st of each year. The facility's designated responsible official must sign this report.

The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data or the license requires such data upon request of

the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [06-096 CMR 140]

(27) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (last amended July 6, 2004), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- A. A computer program and accompanying instructions supplied by the Department; or
- B. A written emission statement containing the information required in 06-096 CMR 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017
Phone: (207) 287-2437

The emission statement must be submitted no later than the date specified in 06-096 CMR 137.
[06-096 CMR 137]

(28) **Air Toxics Emissions Statement**

If Daaquam exceeds the thresholds for HAPs listed in Appendix A of 06-096 CMR 137 in an inventory year, in accordance with 06-096 CMR 137 the licensee shall report every three years (2005, 2008, 2011, etc.) as stated in 06-096 CMR 137, the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a computer program supplied by the Department or a written emission statement containing the information required in 06-096 CMR 137

Reports and questions should be directed to:

Attn: HAP Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017
Phone: (207) 287-2437 [06-096 CMR 137]

(29) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

<u>Origin and Authority</u>	<u>Requirement Summary</u>	<u>Enforceability</u>
06-096 CMR 102	Open Burning	-
06-096 CMR 109	Emergency Episode Regulation	-
06-096 CMR 110	Ambient Air Quality Standard	-
06-096 CMR 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. §585-B, §§5	Mercury Emission Limit	Enforceable by State-only

(30) **Certification by a Responsible Official**

All reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official. [06-096 CMR 140]

(31) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units includes refrigerators and any size air conditioner that contains CFCs. [40 Part CFR, 82, Subpart F]

(32) **Asbestos Abatement**

When undertaking Asbestos abatement activities, Daaquam shall comply with the Standard for Asbestos Demolition and Renovation 40 CFR Part 61, Subpart M.

(33) **Expiration of Part 70 license**

- A. Daaquam shall submit a complete Part 70 renewal application at least 6 months prior, but no more than 18-months prior, to the expiration of this air license.
- B. Pursuant to Title 5 MRSA §10002, and 06-096 CMR 140, the Part 70 license shall not expire and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70 license. An existing source submitting a complete renewal application under Chapter 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State Only.**

DONE AND DATED IN AUGUSTA, MAINE THIS 2nd DAY OF April, 2009.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:



DAVID P. LITTLE, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 08/25/04

Date of application acceptance 08/27/04

Date filed with the Board of Environmental Protection:

This Order prepared by N. Lynn Cornfield, Bureau of Air Quality.

